

Weekly Report

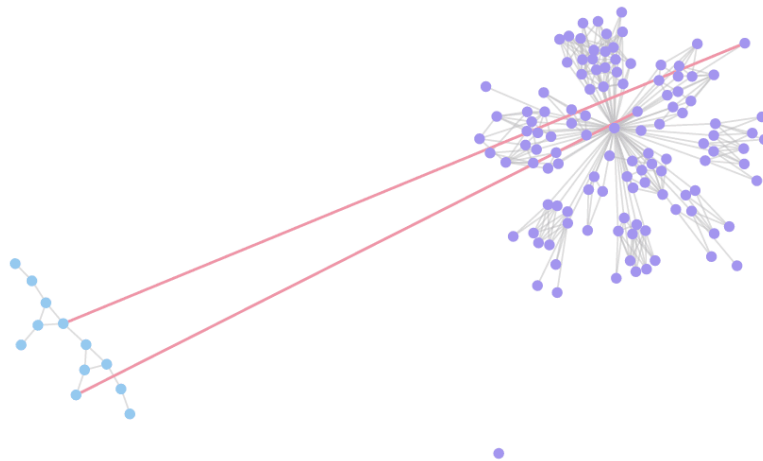
2015/11/09-2015/11/15

1 Done

1.1 Project:

1.1.1 Visualize the topological structure of routers in two AS zones connected:

The ideal effect is that routers in different AS zones are gathered into different areas. One force-directed layout in d3 has only one gravity center and all nodes would be gathered together. And two force-directed layouts used simultaneously would lead to mutual interference. So I added each router a force with different direction which is decided by its asnumber. The result is as follow:



1.1.2 Show related information in the panel:

There are functions for mouseover of all nodes and links to show the details about them.

当前选中设备		当前选中AS域链接	
AS号	1299	流量	undefined
role	edge	起止路由信息:	
带宽	1GB	210.245.171.98->219.76.107.33;	
地址	亚洲 中国 香港 九龙 油尖旺区	113.10.229.130->219.76.106.17;	
位置	22.317945 114.169236	113.10.229.146->219.76.106.17;	
邮编	999077	210.245.171.98->203.198.9.247;	
时区	UTC+8	210.245.171.98->218.102.39.205;	
		210.245.171.98->219.76.107.37;	
		113.10.229.130->219.76.107.33;	
		210.245.171.98->218.102.39.201;	
		210.245.171.98->218.102.21.53;	
		113.10.229.146->219.76.107.33;	

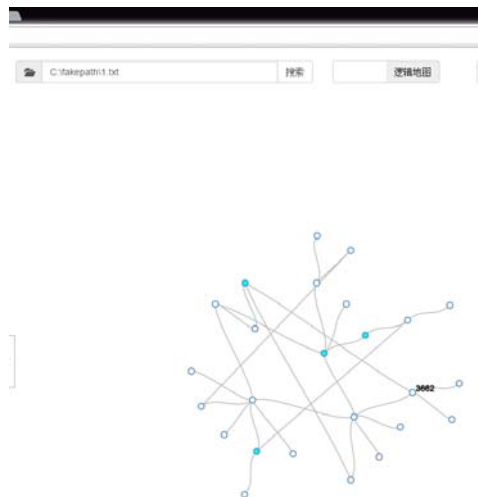
1.1.3 Filter:

- *Achieve linkage filter: country to province to city;
- *Achieve automatic matching with jQuery Autocomplete.



1.1.4 Search routers:

Inputting a ip of a router or importing a local file(.txt) containing a lot of IPs can define the target routers. When user is checking the structure of AS zones, the AS zones containing the target routers will change color and when the structure of routers is observed, the target routers will change color to let user know.



2 To do

2.1 Project:

2.1.1 Search IP segment like 10.76.1.12-10.76.1.90.

2.1.2 Preserve the search content and the selected routers after user switches between logical and physical maps.

2.1.3 Adjust the effect when a lot of neighboring nodes are searched.

2.2 Research:

2.2.1 Finding and reading some papers about historical visualization.